

A7

Claim 6(amended). The process according to claim 1, wherein the etching gas composition contains additives for improving etching gas properties in the dry etching process.

Claim 7(amended). The process according to claim 1, which comprises using a photoresist layer as an etching mask for the organic antireflection layer, and setting the etching gas composition for causing a vertical removal of the photoresist at most corresponding to an etching rate of the organic antireflection layer.

Claim 8(amended). The process according to claim 1, which comprises setting the following process parameters for the reactive ion etching of the organic antireflection layer:

pressure of the etching gases in a range between 2.67 and 26.67 Pa; and

flow of the etching gases in a range between $0.17 \cdot 10^{-6}$ and $1.67 \cdot 10^{-6} \text{ m}^3 \text{ sec}^{-1}$.

Claim 9(amended). The process according to claim 8, which comprises exposing an etching object to a magnetic field strength from above 0 to 120 Gauss and processing the object with magnetic field-assisted reactive ion etching.

Claim 10 (amended). The process according to claim 1, which comprises etching the organic antireflection layer with a plasma from a source selected from the group consisting of an electron cyclone resonance plasma source, an inductively coupled plasma, and a Helicon source.

A7
Cent